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NATIONAL MUSEUM OF SCIENCE AND ART,
DUBLIN.

GUIDE TO THE COLLECTION
OF
IRISH ANTIQUITIES.

PART V.—IRISH ETHNOGRAPHICAL
COLLECTION.

BY

THOMAS J. WESTROPP, M.A., M.R.I.A.



DEPARTMENT OF AGRICULTURE
AND
TECHNICAL INSTRUCTION.

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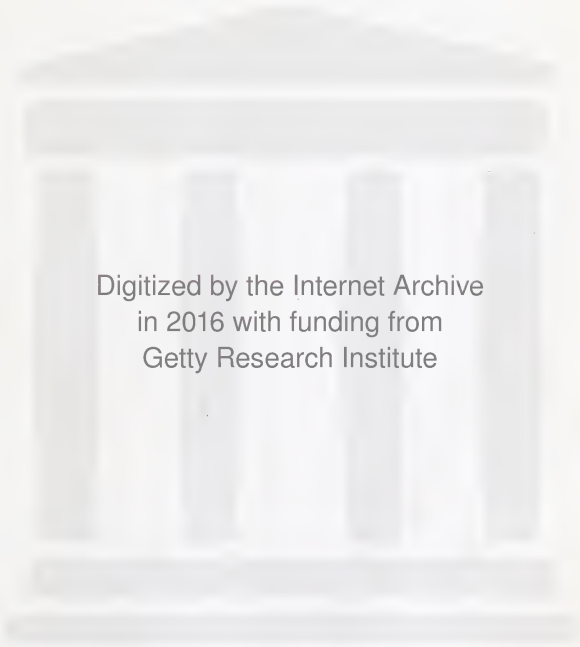
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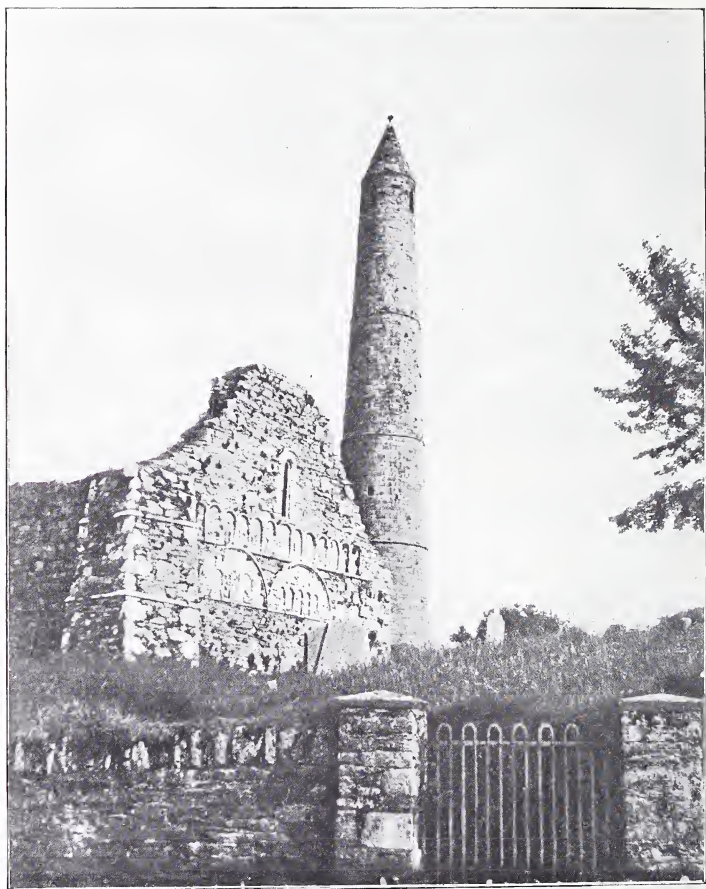
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CHAPTER V.

IRISH ETHNOGRAPHICAL COLLECTIONS.

The subject of ethnography, comprising in itself all that can throw light on the origin, bodily characteristics, and the manners and customs of a nation, is one of too great extent to be more than partially represented in a museum. Portions of it, and those of the first importance, belong to natural history, some to language and literature, and only such matters as are represented by examples of clothing, ornaments, views and casts of architecture and sculpture, utensils, and implements in the Museum will be treated in this part of the Guide.

The Irish of the historic period, unlike many other ancient nations, regarded themselves as a late settlement, and treasured up legends, largely myths, but in not a few instances supported by existing remains, of their predecessors. We are, however, unable to separate the various sources which, flowing together, made the main stream of Irish life, even after written history commences. The isolated position of the tribes, however, kept up a mass of early belief and story which is still found little modernised in the more remote districts of the island, but which under the influence of schools and easy methods of travelling is in great danger of perishing.

This conservatism has given a strange value to many late usages and objects on the one hand, but on the other it has rendered it much more difficult to date utensils, weapons and ornaments. In a country where the fashion changed in every century, or every generation, dating can be brought to a stage of great accuracy. In Ireland the utmost confusion ensues whenever we attempt to lay down rules on the subject, and practically each case should be judged, not merely on lines of shape, structure, or ornament, but on a careful examination of every fact relating to it.

The country was well peopled in early Christian times; the great number of forts or fortified homesteads (over 28,000) and churches, and the traces of cultivation in wild and now neglected places tell the tale, though, of course, there were many uninhabitable tracts of forest, bog and mountain, which have long since been reclaimed. War and hunting formed the pleasure and employment of the

bulk of the nation; there were also great assemblies called Feis and Aenach, a mixture of fairs, merry-making, musical and other contests, and quasi-deliberative assemblies, usually held at some great fort or venerated burial place. The houses were generally of wood; those of the chiefs were carved and painted in what we may guess from the stone carvings and illuminated manuscripts to have been a rich and effective style. Ornamental wicker work was much used, and very probably the plain and even rude churches, whose walls alone remain, were once decorated in a gorgeous and elaborate way with these perishable materials. Sections are added on the ecclesiastical Architecture of Ireland down to the Norman Invasion of Ireland, and the illustrations of early churches and round towers are likely to prove helpful to students. Visitors have now the advantage of being able to procure Mr. G. Coffey's beautifully illustrated and valuable "Guide to the Celtic Antiquities of the Christian Period in the collection of the Royal Irish Academy."

We will without further preface turn to the collection, and examine the objects which may give us most information about the manners and customs of the early Irish.

FIRE AND LIGHT.

It is probable that these first essentials of human civilisation were possessed by even the earliest colonists of Ireland. We are here, however, only concerned with the vessels, such as candlesticks and lamps, which were in use in the Christian period.

We learn from our ancient books that dipped candles and rush lights were in use from early times. Ancient wax for candles has been found near Killaspugbrone and other early churches. Splinters of bog deal and rushes dipped in fat were usual forms of lighting, and moss wicks in grease, contained in a hollowed stone, remained in use down to late times. Some specimens of ancient wax are found in the collection, besides stone and other lamps, and metal candlesticks.

Room IV.: CANDLESTICKS.—The "caindelbra" or candle stand, is named in the Seanchus, and seven great ones stood in the king's banqueting hall at Tara. If we can trust our authors, gigantic "king-candles" or "richaindell" were in use, and carried before kings. They were so large that the spears of heroes are compared to them, and

the Four Masters under A.D. 1557 mention one as thick as a man's body. Of candelabra capable of holding such huge tapers no trace is known to us. The collection contains a number of pricket candlesticks of various ages, with spikes (instead of sockets) on which the candle was impaled—literally “candlesticks.”

RUSH LIGHT HOLDERS.—The rush light (“itharna” or “adann”) was, however, in constant use from at least the sixth century, and the pincer-like rush-light holders are common enough.

It was the custom in early times for the slaves, or, more usually the women servants, to hold the torches or dipped candles at the banquets, and one of the prerogatives of the early kings of Leinster was to drink by the light of wax candles. Oil lamps (“lespaire” and “luacharnn”) were, however, in favour, and were made of bronze in later days.

Earthenware lamps, somewhat like the Roman examples, have been found in crannoges. Specimens of the stone lamp, but usually of remote and probably pre-Christian times, are to be found in the collection.

So early as the date of Cormac's Glossáry, about A.D. 900, hanging lamps were in use, usually suspended from the ridge pole of the house.

CLOTHES.

Room IV.—The materials for describing the dress of the early Irish at various periods are fairly abundant. We can still see in the little text-figures in the Book of Kells how certain classes of people dressed. The high crosses (see the cast of those in the Central Hall) show people both armed and in the robes of civil life in the tenth and eleventh centuries. Several of the shrines and one book cover, as noted in Part IV., also give vivid representations of costume. Despite variety in details, the main articles of dress varied but little from early times to the seventeenth century. They may be enumerated as—(1) a large cloak, covering the whole person, and with or without a hood. It is this comfortable garment, so suitable for a wet and severe climate and open-air life, that the poet Spenser denounces as

fit for rebels, thieves and outlaws. (2) A tunic with sleeves; it is often tight-fitting and with full skirts. (3) The trousers, or trews, tight to the ankle and lower part of the leg. In some cases a kilt was worn, often closely similar to that used in the Highlands of Scotland, and even in Roman times in Gaul. In the earliest times in Ireland the tight trousers were very usually worn. Knee breeches were also used, even in the days of the artists who painted the Book of Kells, in the seventh or eighth century. The cloak was part of the dress of the great mythic hero, Cuchullin; it bore various names, and sometimes only reached to the knee. The tunic with sleeves ("lenn"), the hood ("cochal," whence "cucullus" or cowl), the kilt ("celt") as on the shrine of St. Mainchin, and the trousers ("triubhas"), are all represented in this collection, both in the figures in metal, bone, and stone, and in the actual garments themselves, preserved in bogs. The corpse of a hunter, in the case in Room III., was found in Gallagher bog, Co. Galway, clad in a deer-skin tunic (stitched with sinews) and a cap. A woollen dress of a woman may also be seen with the other clothes in a wall case in Room IV.

Room IV.—Shoes or brogues ("bróg") are of great antiquity; specimens of early Christian times with open work and other ornaments are found in this collection. So also is one of the curious bronze shoes, of which some two dozen were found near the Giant's Causeway. Compare with these the fifteenth century shrine of St. Brigid's shoe. A curious pair of shoes, the soles of one piece of leather, should be examined. Wilde suggests that they may be shoes used at the inauguration of chiefs. This was found in the rampart of a fort at Cootehill, Co. Cavan, wrapped up in leather.

Besides the textile fabrics, we have some relics of the spindles by which the wool or thread was woven. These are the little rings of bone or stone not uncommon in collections. The stone rings closely resemble small quern-stones, whence they are called "fairy mills." Some of the bone ends are notched or slightly decorated and some have spikes.

ORNAMENTS.

Though the ornaments of the Christian period attract less general attention than the splendid "gorgets," torques, rings and fibulæ of earlier date in Room III., they are of the deepest interest and often of great beauty. There is a large collection of glass beads; some are plain, others fluted or melon-shaped, and others of the dumb-bell or hour-glass shape.

Room IV.: BONE MOULDS.—Delicate patterns appear cut on bones, and were probably used for making moulds to cast small golden or bronze ornaments, or as "studies" for the same.

CROWNS AND HEAD ORNAMENTS.

We need only call attention to the beautiful conical spikes and plaques of bronze shown in a Table Case in Room III., which several antiquaries regard as part of a crown. This is, however, very doubtful and requires confirmation.

Earrings also occur in the collection, as well as golden balls worn in the hair; both figure in early Irish literature. The balls are of very thin gold; some are nearly four inches across, others half the size.

Room IV.: AMULETS.—These articles are of very different kinds, and we cannot go at any length into the subject. The curious models of the "Connoch" (a caterpillar, or "worm," supposed to cure disease in cattle) are accompanied by the actual creature for comparison.* These elaborately made charms were not worn but dipped in water, which was given to the beast to drink. An amber bead found in Ennis, Co. Clare, was a charm for childbirth. It bears an inscription in Ogham scores, "L.M.C.B.T.M.," meaningless to us, perhaps the initials of a charm, "L.M.C.B.D.F." was found inscribed in Ogham on a carved stone in Fahan, Co. Kerry. Some amulets were of a Christian character, with dotted crosses. Examples of these occur in the collection.

* One Amulet was found at Timoleague Abbey, Co. Cork, in 1843, the other near Doneraile, in 1834.

like "Maqi mucoi Dovinias," Corea Duibne, or Corcoguiny; and "Maqi mucoi Vlatiana," MacLahiff; or royal names—"Netta Segamonas," the early king Nia (Niath) Segamon—are found, and in a few cases the rank or profession of the deceased—"Tighernaci," lord; "Netta," champion; "Druides," Druid; and "Bigoesgobi," *vico episcopus*, or rural bishop, appear. The inscriptions are most abundant in Kerry, Cork and Waterford, but rarely occur in the large tracts of Dublin, Louth, Longford, Westmeath, and Queen's County, in Leinster; Clare, Limerick and Tipperary, in Munster; in Galway, Sligo and Leitrim, in Connaught; or in Down, Monaghan, Donegal, and Londonderry. Among the Ogmie names in this collection we may note, with their modern equivalents—Neta Trenalugos, champion of Trianlug; Feqreq, Fiachra; Vorrtingerni, Vortigern or Fortchern; Vlcagnus, Ulcán; Domanequi, Domhnech; Maqi Rechta, Machraith; Catuviri, Cathair; Lugudeccas, Lugad (Lugdech). One stone bears a cross in relief, others the word "Anm" (soul, ghost or name). The words are usually in the possessive, the word "stone" or "tomb of" being understood.*

IRISH INSCRIPTIONS.—There are two on stone in the large case on the wall of the Gallery which show the common form of epitaph "Or do" (*oroit do*), "Pray for," or "a prayer for," followed by the name. Such inscriptions with or without a cross are not uncommon; they date from the seventh or eighth to the twelfth century. The lettering is as a rule of beautiful execution, and the more elaborate crosses are frequently of most artistic design.

The most interesting inscriptions in the collection are on the shrines, crosses and bells:—"✠Pray for Chumascáh, son of Ailell" (A.D. 908), on his bell, "Pray for Maelbrighde, through whom it was made, and for the . . . who made it" (A.D. 954) on the shrine ridge. The Apostles' names on the Ardagh chalice. The shrine of St. Patrick's bell has—"Pray for Domnall U Lachlaind, by whom this bell (shrine?) was made, and for Domnall, successor of Patrick, and for Cathalan U Maelchalland, the keeper (maer) of the bell, and for Cudulig U inmaind with . . . who covered it," (A.D. 1091 to 1105).

The Stowe Missal (in the Academy's House) reads:—"The blessing of God on every soul according to its merit. Pray for Donchadh, son of Brian, for the King of Ireland. And for Macc Raith, descendant of Donnchad, for the King of Cashel. Pray for Dunchad, descendant of Taccan, of the family of Cluain (Clonmacnoise) who made this. Pray for . . . nain, descendant of Cat . . . for whom it was

* See last part of the Guide (IV.) for Bibliography, p. 24.



OGHAM STONE IN ARDMORE CATHEDRAL, CO. WATERFORD,
OF LUGAD DESCENDANT OF NIA SEGAMAIN.

made, and for . . . ndin, descendant of Cat
 And for the descendants of T . . . lach." The last was
 injured when later ornaments were added. Donchad was
 titular High King 1023, and Macraith died in 1052. The
 later addition has an inscription, "Pray for Philip, for the
 King of Urmuman (Ormond), and for his wife Aine, &c." She
 was daughter of Macnamara of Thomond, this Philip
 O'Kennedy died 1381. The shrine of Lachtin's arm reads—
 "Pray for Maelsechnail, descendant of Cellachan (O'Cal-
 laghan), for the High King; and for Cormac, son of
 MacCarthaig, namely, for the Crown Prince of Munster;
 for Tadhg, son of . . . for the King . . . , for
 Diarmait, son of MacDenisc; for the successor (coarb)
 of" O'Callaghan was not High King, but a
 prince of Desmond, who died 1161. Cormac MacCarthy the
 King and Bishop of Cashel died 1138.

The Cross of Cong has a number of inscriptions, which
 read:—"In this cross is covered the cross on which suffered
 the Founder of the world. Pray for Muredach U Dubthaig,
 the senior of Erin. Pray for Terdelbach U Chonchobair,
 for the King of Erin, for whom this shrine was made. Pray
 for Domnall MacFlannacan U Dubthaig, Bishop of Con-
 nacht, and coarb of Comman and Ciaran, under whose
 superintendence the shrine was made. Pray for Maeljesu
 MacBratdan O'Echan, who made this shrine." Turlough
 O'Connor died 1106.

In the Central Hall will be noted two Irish inscriptions
 on the bases of the casts of the high crosses of Monaster-
 boice and Tuam.

The first was put up by the Abbot Muredagh, probably
 the second of the name, who died A.D. 924, and reads:—"Pray
 for Muredach, by whom was made this cross." The
 second (Tuam) has the words " . . . for Thoirdelbuch
 U chonchubuir for the (successor) of Jarlath, by whom was
 made this (cross). A prayer for O'Ossin for the abbot by
 whom it was made . . . a prayer for the artist for the
 servant of Christ . . . a prayer for the successor of Jar-
 lath for Aed O'Ossin by whom was made this cross."

On the shrine of St. Caillin of Fenagh, the patron of the
 O'Rourkes of Breffni, we read:—"Pray for the man who
 made this shrine of Caillin, Brian mac Owen O'Rourke, and
 Margaret, daughter of Brien. And the time of our Lord
 was 1536 years—Ave Maria—Pray for their souls," the rest
 being much worn and defaced. The slabs on the wall in the
 main Gallery read "(or do) muir . . . m(ac)"; "or do
 Bran"; "Or do Dunchad prespiter hic"—pray for Donat
 the priest here.

On St. Molaise's shrine the following inscriptions occur:—"Pray for Cinnfailad, for the successor of Molaise for whom this case (was made) and for Gillabaithin, the artist who made the"

On the "Dallway harp" (Room IV.) is a long inscription:—"I am the Queen of Harps," in Latin, then, in Irish—"These were the servitors to John FitzEdmond at Cloyne, at the time that I was made—namely." The names of the steward, superintendent, butler, beer-butler, cook, chamberlain, house-marshal, discreet attendants, tailor and carpenter—Donchad fitzteige, who made the harp, 1626. "Gillipatrick mac Cridan was my musician and harmonist, and if I could have found a better him should I have . . . may God have mercy on them all." A most valuable list of a semi-Celtic household in 1626.

MISSILES USED IN WARFARE.

From early times the Irish enjoyed that reputation for strong and accurate stone throwing which they maintain to the present day. Stone throwing, though not a feature of the great battle of Clontarf, was very usual in actual warfare, as, for example, in the days of Giraldus Cambrensis, about 1180; at the destructive battle of Corcomroe in 1317, and (as Dr. Joyce appositely recalls) at the breach of Limerick in 1690. Special "champion" stones are mentioned in early and mythic times. They may have been hung on a strap, and were flattened in shape; they were supposed to have some magical power of destruction. The sling (tailm, teiln, or taball) and a sort of wooden "sling" or hurling stick were in use in pre-Christian times. A carving of a sling hanging from the hand of a warrior will be found on a panel on the face of the east of Muredagh's high cross in the main hall. Of course, ordinary field stones and pebbles were generally used, but shaped stones were sometimes employed.

BOWS AND ARROWS.—The bow (fidbac), *i.e.*, "fid," wood, and "bac," bend, or the later "bogha" may also be seen on the base of the above cross. The group of Irish warriors drawn by Dürer in 1521 show a "long bow" (4 feet at least in length). Good carvings of bows and arrows will be noted in the hands of the centaurs cut, respectively, on the base of the cross of Monasterboice, and on the door of Cormac's Chapel at Cashel, of both of which casts are to be found in the Museum.

STRAW DRESS.

The dress of a masker or straw-man was brought from Kerry by Dr. Charles Browne, and is a very interesting

object, from its similarity to dresses still worn in Spain by the peasantry. Our oldest tradition has always asserted that there was a migration from Spain to Munster. It is not wonderful, therefore, that some have been tempted to think that this may have been a traditional form of dress of a pattern handed down for many ages from the original Spanish settlers. Its similarity in some respects to Japanese and Chinese straw cloaks is evident, so that too much stress should not be laid on mere similarity. The late Professor Joseph P. Reilly, however, gives a number of interesting facts tending to show a probable connection with Spain. The same methods of cultivation, and the same breeds of pigs and ponies occur in Spain and Kerry. Camden mentions the resort of Spanish and Portuguese fishermen to the fishing grounds at the S.W. corner of Ireland, and they continued to frequent our fisheries till far later years. Certainly, the straw dress used for amusement and masking in Kerry seems almost identical in shape and construction to those worn for comfort and shelter by the Spanish and Portuguese peasants.

CANOES AND BOATS.

The most primitive form of boat, the currach, described even by Roman writers from Cæsar down, and often mentioned in the "Lives" of the Irish saints, is still in use on the Boyne and elsewhere. It is a frame of wood or osiers, in shape like half a walnut shell, and covered with hide. "A boat of one hide," is named more than once in early Irish works. The Irish monks were expert in using these boats, and undertook long voyages in them. St. Columba went from the north of Ireland to Iona in one, and St. Brendan and his monks undertook their long and adventurous voyage far into the northern seas (if not, as some think, to America itself) in one of the larger kind. The long canvas-covered canoes or currachs, with sharp up-turned bows, are familiar objects on the western coast of our island, and with skilled rowers can ride in safety over seas that would place a strong ship's boat in danger. The wooden canoes, hollowed out of a tree trunk, are often found in bogs, and there is a perfect and very large example in the Museum. The process of "burning out" such a boat is shown in the model of the Swiss lake dwelling.

MUSICAL INSTRUMENTS.

Room IV.—The ancient Irish, like their descendants, were much attached to music and song. The harp is very properly the ensign and emblem of Ireland, for every household.

of any position kept one, and a large proportion of the people could play thereon. There are three good examples in this collection in Case S—one a nameless harp, the second the harp of O'Neill's bard; these being complete. The third, and most interesting, is in pieces. It is the beautiful "Dallway Harp," so called, for it is really the harp of Sir John Fitz-Edmond Fitzgerald of Cloyne. It was made in 1625 by Donchad fitzTeige, the family carpenter, who proudly carved on its bow, "Ego sum regina Cithararum"—"I am Queen of Harps"—and decorated it with the family arms and a choice procession of animals and strange monsters. It has been carefully described by Lord Walter Fitzgerald, and its interesting Irish inscriptions were published by Eugene O'Curry.*

A bone trumpet will be found in Case V. The great bronze trumpets, so remarkable for their perfect rivetting and execution, are in the wall case in Room III., to the left of the door into Room IV.

HABITATIONS.

There are few subjects connected with ancient Ireland which could be treated more amply than the subject of its habitations. Documents of various ages give copious particulars about dwellings and their construction. However, the abundance of timber and the skill of our ancient carpenters led to houses, even of the first importance, being made of that perishable material; so but little of the buildings themselves actually remains except the defensive walls and earthworks that enclosed them, and numbers of rude stone huts.

It appears at first, that ecclesiastical buildings were also of wood, and a monastic settlement was often merely the older group of buildings in which some converted chief had resided. "When a chief gave his fort to an early missionary the latter probably did nothing to alter the structure of the establishment. The monastery was organised on tribal lines: the great hall became a church . . . the huts of the retainers outside the fort were filled with

* Kildare Archæological Society and O'Curry's "Manners and Customs," Vol. III., pp. 292-293. For other harps, see *ibid.*, p. 299.

catechumens.”* Even in the burial of the dead the ring wall or mound was often employed to surround the grave, and the remains were very similar to those of the residences of the living.

The houses, as a rule, were circular and of timber. They were sometimes made of wrought timbers combined with wicker work on earthen walls, or smooth plastered with clay. In other cases they were probably of rude trunks and earth. The more stately buildings were adorned with carved yew posts, painting and metal ornaments. Carefully morticed beams are often found in the crannogs (the lake and marsh dwellings), and even under the earthworks of a few forts in Ulster, where the ground was swampy as at Dorsey. Within the more important forts were usually found a large hall, often with small bedrooms round it, a kitchen, a “grianan” or woman’s hall, on the sunny side of the courtyard, and various other huts. A crowd of houses stood outside the enclosure, leaving a “faitche” or “green” for sports. The green was often marked out by posts and chains. The water supply was generally excluded, and springs are rarely found in the forts, not only of Ireland, but of Great Britain and the Continent. Cattle were often kept in a fort or bawn (bodhun or cow-fort), but were sometimes kept within the main residential enclosure itself. Carvings of the beehive-like wooden huts of the Gauls, with conical thatched roofs, appear on Roman remains, and closely resemble what we know of the early Irish dwellings.

In rocky districts (especially along the western coast of Ireland) where timber was scarce, clocháns, or beehive huts remain often in absolute perfection and quite habitable. They are found in groups within the ambit of ring walls, notably at Fahan, in Kerry, where a wonderful settlement of over four hundred huts and forts remains.†

Some of these beehive huts are certainly of great age, but they continued to be made down to comparatively recent times, and similar, but slighter structures are made in Kerry to this day. Photographs of various clocháns (notably the monastic cells at Skellig) should be examined in the Dunraven collection of photographs.

FORTS.

The enclosures which we call “forts” were really court yards and cattle pens. They were not military structures or castles. In the ruder state of society siege-works, and even blockades were hardly known, but protection against

* “Ancient Forts of Ireland,” T. J. Westropp. Section 42.

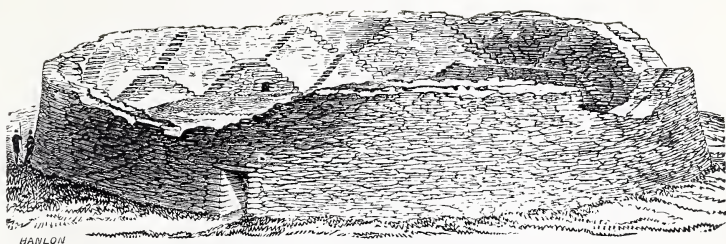
† An ancient settlement in Corcaguiney—R. A. S. Macalister. Trans. R.I.A., XXXI.

a sudden raid or night attack was most necessary. Forts, exactly similar in plan, details and structure, occur across central Europe, from Perm on the eastern border of Russia, and near Volo in Thessaly, along the Danube valley and the shores of the Baltic, in Russia, Germany, Austria, and Sweden. They are found in Holland, Switzerland, and France, and all the British Isles. Despite their wonderful similarity, they appear to have been made by various nations and at widely variant periods. Some of those in Bosnia and Bavaria certainly date back to about 1100 and 800 years before Christ. Others in Scotland and Ireland were made in the eighth to the tenth centuries of our era. Numerous cases of forts made or repaired are recorded in the historic period from, say, A.D. 350 to the Norman Invasion. The last recorded stone forts were built or rebuilt in the period from A.D. 1060-1100, while a rath, or earth fort of circular mounds and ditches, was made near Ennis, in Clare, for the Princes Donchad (died 1242) and Conor O'Brien (died 1269). The Normans also made numerous earthworks after 1170.

The Irish language is exceptionally rich in fort names. "Dun" is found, in the form "Dunum," in Cæsar's "Commentaries," Ptolemy's geography, and other early records (of the period about the beginning of our era) from the mouth of the Danube to Ireland. Rath occurs as "Arad" and "Hrad" in Central Europe; we usually apply it to an earthen fort. "Liss" is used for court-yards in Brittany (les or leis), and is usually applied to earth works. "Caher" (cathair) originally appears to have meant a settlement or entrenched village, and in early Christian times was used both for a monastery and for a "see" of a bishop or abbot (cathedra), and has often taken the place of "Dun" in fort names.* It is nearly always used for a stone fort. The other words are of less frequent use; they are "dangan," a high fort; "pallis," a palisaded fort; "sonnach," a ring fence or palisading; "cashel," a dry stone wall; "tullaghan," "duma" and "mota," a high mound or mote; "oan," a stone fort, with a souterrain or artificial cave ("uamh," a cave); "long-port," and several others.

The most instructive remains are found among the stone forts or cahers and duns. A model of the very curious Staigue Fort, Kerry, is found in the Museum, but the internal arrangement of steps is very exceptional. The outer face of the wall and the doorway covered by great lintel stones is, however, most characteristic of Irish and British forts. The walls in all cases are of dry stone, without mortar, and

* For example, Mari dunum became Caer-Marthen; Dooneerish in Clare is Caher-duneerish; while in remoter places like Aran the stone forts are always called "Dun."

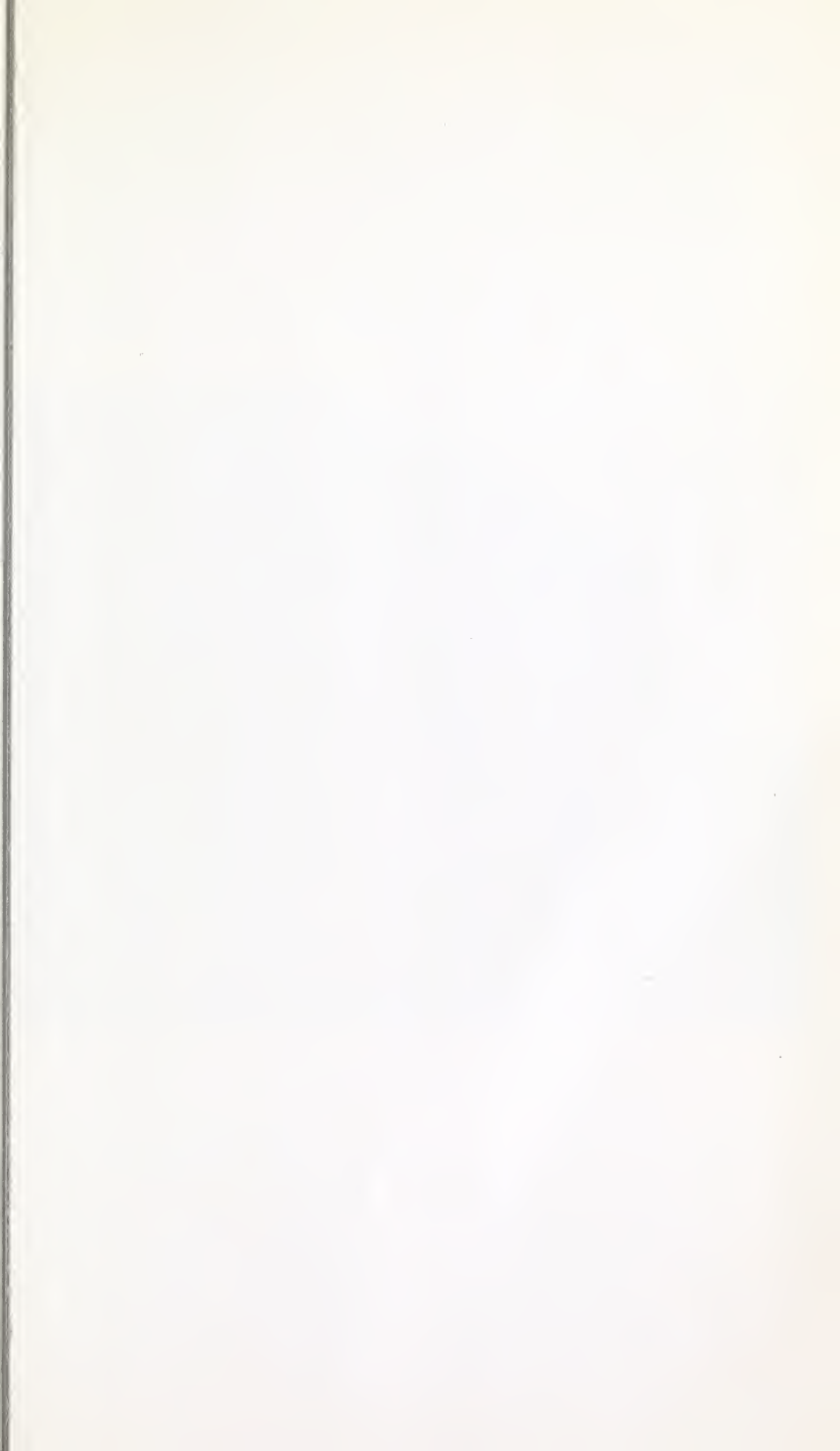


STAIGUE, DRY STONE FORT, KERRY.
(By permission of the Royal Irish Academy.)



CAHERBLONICK and DOLMEN.
 FORT, DOLMEN (CROMLECH) AND HOLED STONE, CLARE.







DUN EOCHLA, INISMORE, ARAN ISLES.
(Outer wall of a dry stone fort.)

as a rule laid in irregular courses skilfully built with close joints. The inner and outer faces are of large blocks, and the inner part is often packed with loose filling. Sometimes the wall is of two or three sections built against each other; at times these sections form long terraces, running round the interior, and have steps of long stones leading from one to the other. A few forts have V-like arrangements of steps, others cross each other in X-like arrangement, as in the case of Staigue Fort. The masonry can be well studied in the Dunraven collection of photographs; note especially those of Dun Aenghus and Dun Conor, in Aran Isles; Dunbeg and Staigue, in Kerry. A few Irish forts—Dun Aenghus and the Black Fort, in Aran; Ballykinvarga, in Clare, and Dunnamoe, in Mayo, have an “abattis” or defence of jagged pillar stones set round them, and it is very probable that many earthworks were similarly defended with a “sonnach” of stakes.

In plan the forts, both of earth and stone, generally consist of one or more rings; this is the most usual type of Irish fort. The rings rarely exceed three, which some suppose to mark a royal fort, but this arrangement is not found at the best known royal forts—Tara, Emania, Rathcroghan, &c.

Similar forts with straight sides are also common; they are supposed to be later than the ring forts, but from the objects found in them must be early, at least in some cases, in central Europe. Various British antiquaries regard them as Roman, but their occurrence in Ireland and in places on the Continent where the Romans never settled, contradicts this, though many are probably of late origin, Norman or Irish.

The mote, or high conical mound (sometimes with a lower side enclosure and surrounded by one or more ditches) is not uncommon. It is not, as some allege, confined to Norman times. The type is found in Prussia, Austria, and even America, yielding in Austria early remains, while recent excavations in France found Gallo Roman antiquities in several such motes. The mote of Downpatrick is mentioned by Jocelin, an early Norman writer, as having long preceded the English invasion. The forms of residential, sepulchral and ceremonial motes do not differ externally. Their age can only be determined by excavations. The term “mote” is applied to numerous types of earthwork. Records of the making of such are found late into the 13th, and perhaps down to the 14th, century, but whether these refer to the high conical mote has yet to be established, though many such mounds are probably late and made by the Normans.

The simplest form of fort is certainly the "cliff castle" or "promontory fort." These structures are formed by cutting one or more trenches and raising mounds across the neck of a headland, or even of an inland spur projecting from a mountain. The great Bailey of Howth was of this class, and part of the two lines of deep ditches is plainly marked. The most elaborate of these forts, Dunbeg, near Fahan, in Kerry, consists of five mounds and trenches, and a wall with elaborate gateway, bar slides, and guard rooms. One in Iceland is said to date 990 and to be sepulchral. Several cliff forts, such as Cahirconree, are named in early Irish literature. The latest known examples are in Kerry, and date 1579 and 1637.

The cattle enclosures, whether circular or straight walled, are usually of slighter structure than the residential forts, and have no steps or terraces.

The largest stone forts in Ireland are Mōghane, Co. Clare, and Dun Aenghus, in Aran. The largest earth forts are Dorsey (nearly a mile long), in Co. Armagh, and Dun Ailinn, Co. Kildare. The largest motes are Downpatrick and Clogher. Besides these there are long lines of earthwork, such as the Danes Cast, in Down and Armagh, and the Dun Cladh and Worm Ditch. There are also long but slight earthworks like the Cladh Ruadh from Kerry Head to near Charleville, and the Rian bo from Ardmore to Ardfinan.

CRANNOGS,* OR LAKE DWELLINGS.

In the very earliest stages of human society an island, or a spot of firm ground in marshes, would naturally be sought as a refuge. Very little toil was needed; rude huts were made, and sometimes the edges of the site were fenced or raised with trunks and branches of trees and shapeless heaps of stones. With growing skill and experience, improvements took place, trees were cut and rudely shaped, and eventually hewn beams, fastened by mortices, stakes and pins, made a more level and safer platform, and the rude piles of stones were built into walls. Where an island was not available, a shallow was raised above the water level with beams and stones, or a hut was built on a platform, supported on posts, very similar to some of those still built on the shore in the islands of the Pacific. In bogs a ditch was dug round a patch of firm soil, and this kind of defence in later times evolved into the fosses dug round a fort or castle. In Ireland crannogs were made and used from very early times, many centuries before our era, down, at any rate, to the time of Queen Elizabeth, and even occasionally in the following century.

* "Cran," a branch, *i.e.*, a branch platform.

Two cases in the Museum contain objects relating exclusively to crannogs. A model of a Swiss "lake-dwelling," which will give a general view of the employments of the inhabitants of such early settlements, can be seen. They are shown casting or hammering weapons, weaving at an upright loom, fishing, practising archery at a target, and burning out a log canoe.

Many Irish crannogs have come to light by turf cutting and the drainage of lakes, so the collections of the Royal Irish Academy in Room III. of the Museum are rich in objects of all periods found in these places, accidentally or by systematic investigation.

One of the earliest explorations took place about 1840 in the crannog in Lagore bog, near Dunshaughlin, in County Meath. Sir William Wilde and Dr. G. Petrie, seeing antiquities brought from the site, visited it, and procured numbers of objects usually made of bone or wood. The structure rested on posts of black oak six or eight feet high, with mortised cross beams fitted into them. These supported six or eight huts, about twelve feet across. The timbers were fastened with iron nails. The crannog of Lagore was a stronghold of the O'Melaghlin, and was sacked by the Scandinavians of Dublin in the ninth century.

The crannog at Drumkellin, in Co. Donegal, was ruder, the beams having been shaped with stone hatchets. In Roughan Lough, near Dungannon, was a crannog, noted as being the refuge of Sir Phelim O'Neill in 1653. The English at last assailed it in boats and took O'Neill prisoner. This place yielded bronze spear heads and other objects, including a sandstone quern decorated with a Celtic cross in relief.

Dr. Caulfield has published in the *Journal of the Royal Society of Antiquaries of Ireland* an account of an attack by Sir Richard Bingham on a crannog in 1590.* It was newly made by Daultach O'Connor, in Lough Lene, Roscommon.

In late years the Rev. Dr. Buick made a very careful exploration of the crannog of Moylarg, in Co. Antrim. It yielded 250 flint implements, remains of querns, whetstones, leather, pottery, iron, an axe and a cross of about the ninth century. Dr. D'Arcy's work on the crannogs near Clones should also be carefully studied in the collection.

Similar to crannogs are the lake forts, or walled islands. Both of these are often mentioned in early books. For example, St. Fechin of Fore curses the dun of Blathmac, son of King Aed, slain in Lough Leane (Westmeath), and the "island" was burned.† St. Ciaran of Clonmacnoise removed an "island inhabited by Gentiles and rabble" in a

* R.S.A.I., Vol. XVIII.

† *Revue Celtique*, XII., p. 331.

lake.* The annals record the destruction and burning of several others from 850 to 985. King Brian Boru repairs other "islands" in 1002, and incidental notices occur in 1258, 1524, and 1590. The ancient fiction, "the voyage of Maelduin," often describes wall-girt "islands." Walled islands are known to exist in the Counties of Donegal, Antrim, Galway, Clare, and elsewhere. The curious marsh fort of Dungorkin, in Londonderry, is built on piling and transverse beams.† For particular information we refer readers to the bibliography at the end.

Room III.—If we examine the case in the Museum, Room III., near the door into Room IV., we shall see a carefully arranged and most instructive series of objects. We do little more than note the principal remains, as students in the Museum should examine the antiquities for themselves and supplement the knowledge so gained by study of the printed material. From the crannog of Ballinderry, Westmeath, should be noted the large iron swords and daggers, the round objects with holes through them which are "whorls" for the ends of spindles, and are made both of bone and stone, melon-shaped stone beads and other beads, a formidable pair of fish spears, one with nine, the other with eight barbed teeth, and simpler fish spears barbed like the last, fish hooks of good execution, and spear heads. From Toneymore crannog, in Cavan, we find some well-made bone combs quite good enough (if perfect) for modern requirements. They are double, and the rib between the teeth is decorated, often, like other objects in crannogs, with dots surrounded by one or more circles. There are pierced stones for sinking nets, and stone lamps. Loughrea crannog, in Galway, and Strokestown, Roscommon, yielded various forms of iron knives, some with the original bone handles. From Ardkillen, Roscommon, are some grim remains, heavy iron fetters, and a skull exhibiting some twenty sword cuts; indeed a crannog was a far more suitable spot for imprisonment than the slightly fenced forts and wooden huts of the ordinary dwellings.

* Life of St. Ciaran, Book of Lismore.

† "Ancient Forts of Ireland," T. J. Westropp. Sections 109 to 114.

on the land. See also the iron keys, nails, and fork from Ardkillen, the former also suggesting "safe keeping."

There are several large iron spears and swords, fine axes, pennannular brooches, and a pair of shears, from Lagore. These were chiefly secured by Dr. Petrie. Note also the curious bill hooks from several crannogs, flint implements from Moynagh crannog, Co. Meath, which also yielded little iron pans, combs (some decorated with lozenges and concentric circles), bone scoops, bronze pins, and carved bones; one with designs "struck out" with a compass. In the end of the case may be seen a large and perfect pitcher from Lough Faughan, Co. Down. The other side of the case holds small wooden paddles and pottery (rudely decorated with sloping lines, chevrons and dots) from Ballydoolagh crannog.* There are bronze pins from Strokestown, remains of leather shoes, one very neatly ornamented on the centre of the instep; one of the so-called "otter traps" from Craigwarren crannog, and lastly, the bone combs with lozenges and zigzags, bone pins and scoops, and tines of deers' horns found in Christchurch-place, Dublin.

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- "Practical Geology and Ancient Architecture of Ireland."—G. Wilkinson.
- "Ecclesiastical Architecture of Ireland."—R. R. Brash.
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- "Pagan Ireland."—Col. Wood-Martin.
- "Wakeman's Handbook of Irish Antiquities."—John Cooke.
- "Society History of Ancient Ireland."—Dr. P. W. Joyce.
- "The Lake Dwellings of Europe."—Dr. Robert Munro.
- "The Lake Dwellings of Switzerland."—Ferdinand Keller.
- "Ecclesiastical Architecture of Ireland."—Arthur Champneys.

* Deposited by the Royal Society of Antiquaries of Ireland.

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IRISH ARCHITECTURE.

The life of a nation is not merely material, and so to confine ourselves to the residences were to neglect a very important sidelight on the race. Along with the enclosures of earth and dry stone, which at the most only show rudiments of architecture in the latter, were wooden houses which have utterly perished. We can form, however, some notion of these from early Irish literature; they were, at least in the residences of the kings, of considerable elaborateness, fine specimens of carpentry, richly carved and painted, and, in places, adorned by metal ornaments. Outside they

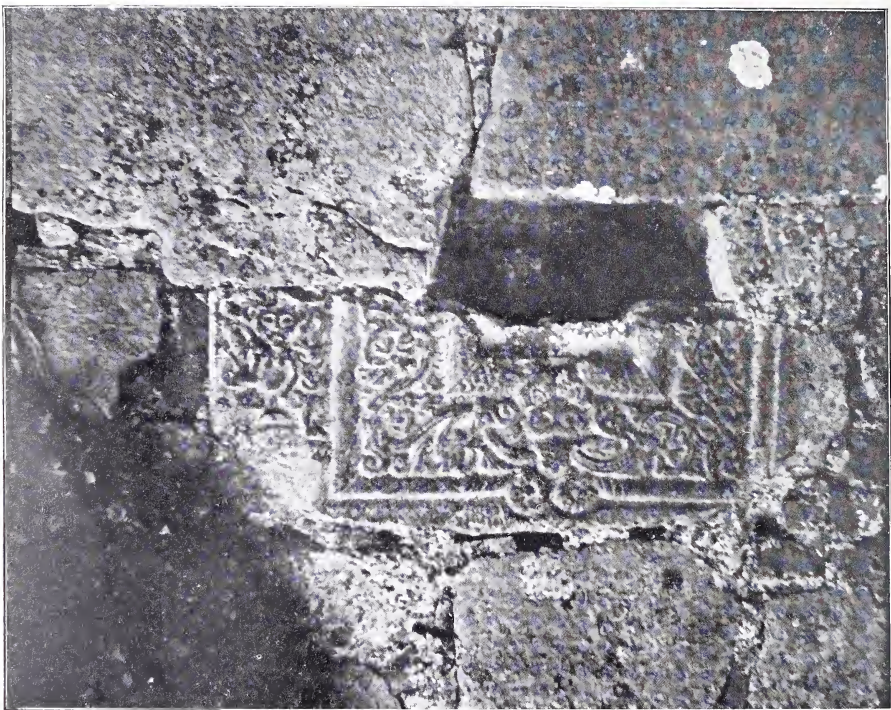
were only painted in lime wash, red, blue and green, apparently with a band of white round the doors, as is still usual in the wilder districts along the coast. The churches, at least, had decorated ridge beams, with bold ornaments at the ends. Wickerwork of ornamental nature covered the surfaces, and, at least in later days, wainscoting of carved wood. Probably the patterns of early manuscripts and stone carvings give us a clue to the designs for, even in the gospel books, religious design is more or less confined to a few pages. The "honeysuckle," "trumpet," spiral and frets at first predominated, but in the latter centuries (say from A.D. 700 onward) interlacing, both ribbon and animal forms, steadily grew in favour, and by A.D. 1000 the older patterns, descended from the art which produced the La Tène designs, passed out of use.

The architecture originating in the forts and tombs was simple. Lintelled doorways with slightly inclined jambs are found, also plinths and cornices of perfectly plain blocks, and simple window slits derived from the forts and stone huts. From the far earlier dolmens may have been derived the *antae*, or projecting buttresslike ends of the side walls, in some churches. Irish paganism does not seem to have made idols or to have carved stones in their honour, unless the curious stones (of which casts may be seen in the collection)* be such, and even these are very few compared with the number of carvings from sepulchral structures like Newgrange. We only hear of the worship of "Crom (Cenn) Cruach and his subgods twelve" under the symbols of rude stone pillars, forming a circle round the chief stone, and of a gold capped pillar worshipped at Clogher. There were other venerated pillars and stones at Usnach, Tara and elsewhere, less avowedly divine. Unlike the Scandinavian and the Gauls, we have no native illustrations of the Irish gods and heroes. The Christian writers, however, turned the gods into human warriors and preserved many of their legends.

Once a nation begins to raise temples to its gods, architecture is close at hand. Naturally, Christianity at first took such buildings as came to hand: it took over all that was not definitely connected with the former gods, and even accepted them as ancestors and heroes, and tolerated much of the old reverence for wells, stones, and trees. In the case of pillars, as in Brittany, it cut a cross or a word *Dni (domini)* "Jesus" or "Soter" (so we are told, I know of no existing example in Ireland), but it avoided the great "aenachs," or places of assembly, and the great pagan cemeteries. It accepted gifts of structures, a fort, a house or a barn (as at Saul-patrick), and probably the majority of

* Mr. G. Coffey: Proceedings Roy. Ir. Acad. Vol. XXIV. (c.), p. 257.





WINDOW SILL WITH NORSE CHARACTERISTICS, RATHBLAMAIC, CO. CLARE.
(The sill has been built into a later wall and reversed).

the first churches were circular wooden structures like some still in use in Abyssinia.

It should be remembered that wooden churches were very common in the western world at that time, and that they long continued to be made; several beautiful Norwegian examples of quaint design and rich carving have been preserved to our time. So in Scotland St. Columba's monastery at Iona first consisted of timber buildings. The important missionary centre of northern England at Lindisfarne, which sprang from the Columban missionaries, was of like character. St. Finan about A.D. 650 built a church of wood there. On the other hand, the oratory of St. Flannan of Killaloe, on the Flannan Islands, far to the west of the Scottish coast, was of dry stone and very rude execution. In England so late as A.D. 942 St. Dunstan built a wooden church with gilt (or golden) leaf ornaments at Glastonbury. In 1013 the body of "St. Edmund, King of the West Saxons," was translated from London to Bury, a wooden church was built for its reception at Greensted; there (till recently at least) remained a fragment of a Saxon church of wood. Casts of a carved doorway of a Norwegian church, etc., ought to be examined in the Museum Gallery as giving us an idea of the probable ornament which once covered the now naked walls of early Irish churches. These, possibly after A.D. 800, may have included groups of figures such as we see on the Irish crosses, of the Adoration of the Magi, the Baptism of our Lord, the Temptation, the miracle of the loaves and fishes, the Crucifixion, and the Judgment; with old Testament scenes such as the Fall, the Ark, David, the 3 "children" in the furnace, and Daniel. Of course paintings like those in the illuminated Gospels were common. A photograph of the window sill at Rath-blamaic, in Clare, is given, and is strikingly similar to the Norwegian designs, whatever be its origin. It suggests that another and non-Christian school of ornament may also have been employed.

Stone was, however, in use for churches in very early times, where it abounded or where wood was scarce, as on the Skellig Rocks. Stone oratories, only differing from the early huts in shape, were made, and in many cases remain more or less complete, from early times, especially along the western coast of Munster as at Gallerus, Kilmalkedar, Lough Curraun and Skellig, in Kerry, and Bishop's Island, Clare. In Corcaguiny, in Kerry, we find several dry stone oratories earlier than the year A.D. 700, some, perhaps, even of the 6th century. The Dunraven collection of photographs in the Museum, and another in the course of formation, illustrate the progress of Irish ecclesiastical architecture from the dry stone oratories to the elaborately decorated churches which were made in the 11th and 12th centuries. By the middle of the last period the Gothic architecture was intro-

duced by the Cistercians, and soon entirely superseded the native Irish schools, even in purely Irish districts, after the Norman settlement of 1170. Very little stone architecture was attempted other than in the churches and round towers. The Irish built no stone, mortared castles, and the residences attached to the churches, like those in which the chiefs dwelt, were dry stone huts, or larger houses of wood, wicker and clay.

It is, of course, impossible in a short guide to give a detailed study, so we will note the leading types as far as possible in order of time, briefly describing them, and indicating if they are illustrated by models, casts, or photographs in the Museum, which can be examined by students.

The collection possesses an excellent model of the very early but beautifully built dry-stone oratory of Gallerus, near Smerwick Harbour, in Kerry. The stone work exhibits that perfection of fitting that we see in the early cathairs, or dry-stone forts. The roof is not vaulted, but each course projects beyond the other till the sides approach near enough for single stones to join them and complete the building. The stones also slope outward, so that even in the wettest weather of that rainy coast we have always found the interior dry. The west door has the inclined jambs and lintel so characteristic of early forts and huts. Inside two projecting stones, with holes, show that the door (possibly a skin curtain or of wicker and leather) hung by ropes, or straps, from overhead. The east window is a rather shapeless little loophole of several stones with a rounded head. The oratory is only 15 feet by 8 feet inside (23 by 16 outside), and closely resembles an overturned boat, the curved sides meeting in a keel-like ridge. Similar to it, but ruder, is one at Kilmalkedar, not far away, but its roof is broken. A small, still ruder cell on the Flannan Islands, off the west coast of Scotland, is attributed to St. Flannan, founder of Killaloe, about A.D. 640-680. Another type, found on the Skellig Rock and elsewhere, differs in having upright walls for the height of the door, forming a sort of platform for the "inverted boat-like" roof. Some of the early huts at Skellig, Illauntannig (or St. Senach's Island), opposite Tralee, and elsewhere, have crosses of white stones inlaid in their walls. Similar string courses are sometimes found, but the Irish never improved upon this easy and decorative feature in their later churches, very probably from the custom of whitewashing not only churches, but even forts, which rendered useless such contrasted colour.

The next most characteristic church style is that found in the oblong building with gables. These churches had sometimes stone roofs, but more usually were covered with straw or planks, being so easily roofed and their solid masonry being difficult to injure, we find Irish monasteries re-estab-

lished, sometimes more than once in the same year, after being burned by the Norsemen and Danes in the wars from A.D. 800 to A.D. 1000.

The most exceptional (and one of the simplest) of these is Temple Benen in the Great Isle of Aran, Galway Bay. Unlike all but the record of one other Irish church at Armagh, it lies north and south, not east and west. It is only about 11 feet by 7 feet inside (15 by 11 feet outside), has the usual lintelled door narrowing upwards in the north gable, and a round-headed east window in the side wall.

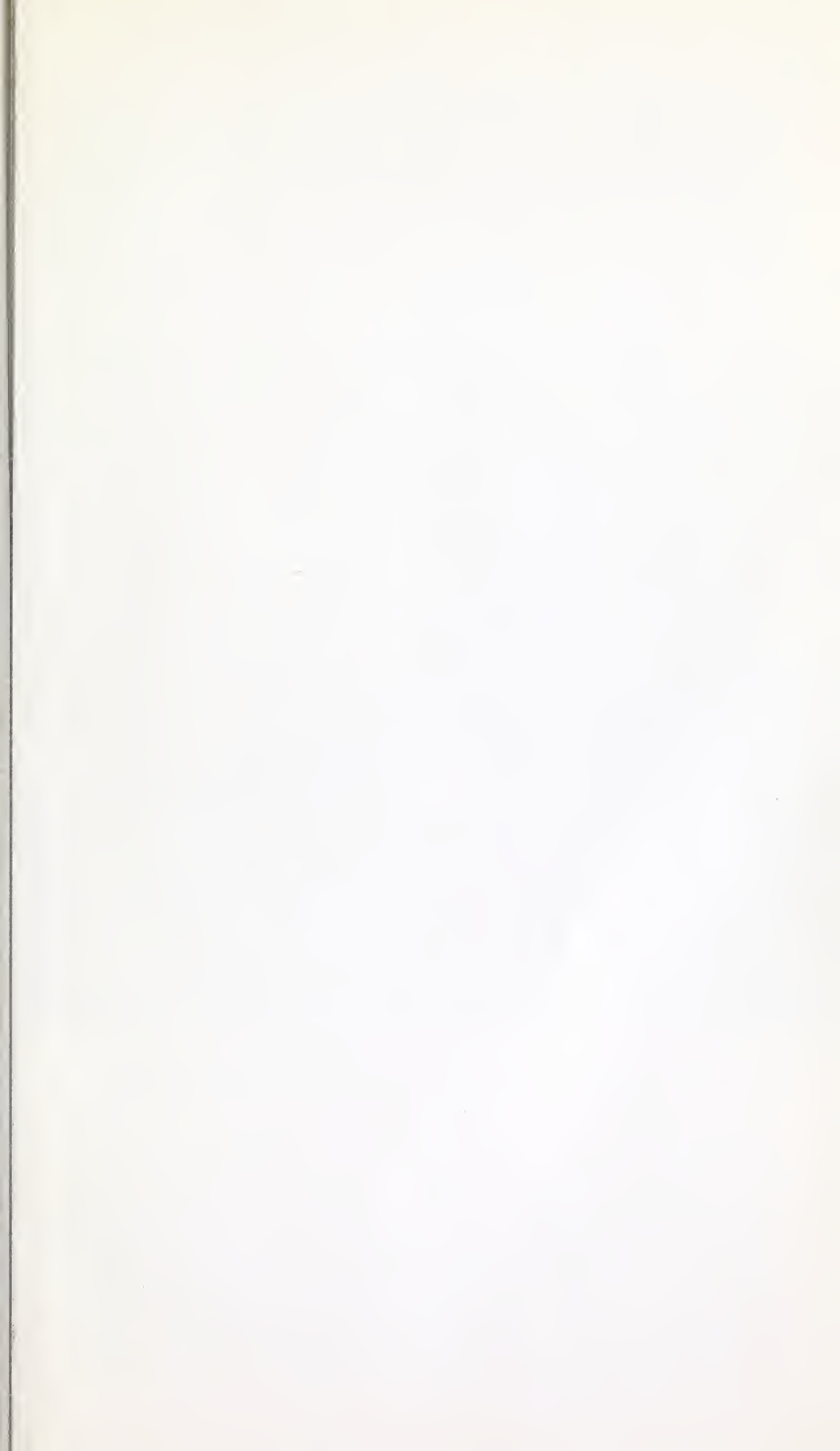
Oratories in the normal position, with their altar windows to the east, abound all over Ireland. They originated a larger church, 40 to 60 feet long and 20 to 25 feet wide, but the features continue with little variety till long after the year A.D. 1000, when more elaborate work begins to appear. It is curious that, all over Ireland, the parish churches from A.D. 1200 to 1500 and later, frequently keep to the same dimensions and arrangements. Plain oblong buildings, often without a chancel, two or three windows to the south, one to the east, a small door to the west—only differ in architecture from the early churches.

We may take the revival under King Brian Boru (say A.D. 980-1010) as a landmark in Irish church work. First let us study the features of the early churches and round towers, for they do not differ from each other. The earliest form of doorway is directly derived from that feature in the forts and huts. In later days (notable examples occur at Glendalough and at the church built by Abbot Cormac Ua Cillene at Tomgraney, in Clare, before 970) a raised band 6 to 8 inches wide runs round the outer edge, probably once coloured. Sometimes a raised panel or a cross in a circle is cut on the outer face of the lintel (as at Fore) or a cross (Greek, ✕, or Saltire, X) is cut under the lintel in the doorway (as at Glendalough and Killiney). The next step is well seen (in the Cathedral and St. Kevin's Church, Glendalough), where a round arch is built above the lintel to relieve the dead weight of the gable on the latter. This was not left open like a fanlight, but closed, usually with neat slabs. The architects soon widened the door and enlarged the arch: the lintel had only to bear the weight of the slabs. This soon led to the abolition of the lintel in large doorways, as may be seen in the cast of Dysert O'Dea doorway. They soon were carved and decorated (as may be seen in the Gallery in the cast of the doorway of Cormac's Chapel, Cashel, A.D. 1127). It must not, however, be understood that the open arch head was later than the lintel and relieving arch, for it was very early. It is rarely a true arch with a keystone, but in some cases consists of only two scooped stones leaning together, a variety of the early angular head or two slabs. It is curious to find this practice continued in

small Gothic doors, even for long after the accession of Queen Elizabeth, in castles as well as in churches. About A.D. 1000, plain recessed arches, two or three recesses, with, or without, neat angle mouldings, or pillars began to come into use. Soon the arches, which had, perhaps, only a carved head (human or animal) on the keystone, were decorated with zigzag (chevron) ornament. Then beading between the chevrons was used, and, lastly, leaf, fret and other patterns appear in the triangular spaces. As in the architectural features, the blank spaces were often decorated in later times, anomalies often occur, which, apart from other considerations, would imply a later date for the arch. The same is true of the high crosses, where blank raised panels remain, sometimes (as at Kells and, probably, Dysert O'Dea) decorated in later times, sometimes left blank or unfinished.

Of windows, there are no equivalents in the forts, and but few in the huts and dry-stone oratories, unless the small spy holes and bar holes in the elaborate and probably somewhat late gateway of Dunbeg, near Ventry, be so considered. The earliest are plain lintelled slits, sometimes tapering, and always opening inward in a wide splay, to let in all possible light. In some cases the head was formed of two stones leaning together. This is not infrequent in round towers, but they usually have a flat lintel inside the outer angular ope. Then and at very early times the head was formed of a hollowed semicircle cut out of a single block or of two stones. The lights always remained very plain, no tracery occurs, and round opes (as at Rahan, King's County) are very rare. In the 12th century, just before the Norman invasion of Ireland, beautiful two-light east windows with wide sprays and rich mouldings (as at Clonmacnoise, Kilmacduagh and elsewhere) came into use. The ornament was usually confined to the windows, doors, and chancel arches, more rarely (as at Cormac's Chapel and Kilmalkedar, Kerry) shallow panelling of arches and pillars lined the sides of the church. In one case (Ardmore and Waterford) the panelling occurs in the west gable outside, and the arches are filled with carved slabs. A rich arcade without carved slabs remains in the fine west front of Roscrea.

Another well marked type is the oratory with or without an overcroft. It was an unusually massive structure, only destructible by laborious and troublesome demolition. Of these buildings we have a good example of the simpler form at Innismurray, off the coast of Sligo. More interesting are those of two storeys. The smallest, and perhaps the oldest, is the tiny cell of St. Molua on Friar's Island, near Killaloe. It measures 10 feet 6 inches long by 6 feet 6 inches wide, being barrel vaulted, with a small east light with a semi-circular head. The overcroft is a small cell in the high-





ST. KEVIN'S ORATORY, WITH STONE ROOF AND CIRCULAR BELFRY,
GLENDALOUGH, CO. WICKLOW.

pitched stone roof. A nave was added in early times, but is levelled. Another larger but similar oratory adjoins Killaloe Cathedral, and is attributed to Brian Boru, who probably repaired it. It measures 36 feet 6 inches by 25 feet 6 inches. A chancel was added and demolished, there is a decorated round-arched door, probably of the later 11th century, and a small early south light with an angular head like those in the round towers. Better known than the Clare oratories is St. Columba's "House" at Kells, in Meath (16 feet 6 inches by 14 feet inside); the original door was high up the wall; it has no decorative features. Still better known is "St. Kevin's Kitchen" at Glendalough. As may be seen by the photograph, it is a quaint and striking structure, a miniature round tower having been built on the western end of the stone roof. The oratory is 23 feet by 15 feet inside, a chancel and side building or sacristy were added, but the first is destroyed; part of the older east window shows above the chancel "arch," which was only cut out of the wall, and there is a lintelled door with a relieving arch above it. The cornice round the building is curiously fitted together. St. Mochta's oratory in Co. Louth is of similar construction, but the features have been destroyed, while, if the similar eastern part of St. Doulough's church, near Dublin, is early, it has been entirely modernised in the Gothic period.

Most advanced of all such buildings in Ireland is Cormac's chapel, on the Rock of Cashel built about 1123. Instead of the simple square or oblong chancel it has a chancel with a recess, usually called an "apse," which feature is only known to exist in any Irish church preceding the Norman invasion at Kilmalkedar, in Kerry, where it was soon broken out and a larger chancel built. Cormac's chapel presents apparently four storeys, with panelling and arcades. There is a southern tower, 68 feet high, of seven stages, marked by string courses, it and the plain and defaced one on Iniscleraun, in Lough Ree, being typical of early Irish towers, other than round. The chancel is apparently three storeys high, also with arcades. The north side is blocked up by the later Gothic cathedral, but had a more massive tower, with a pyramidal stone roof. The rich north porch is represented by a cast in the Museum Gallery. The tympanum under the arch has a centaur shooting a lion. The masonry is all very fine and of brown sandstone, like the round tower near it, though on a limestone rock. The nave is 30 feet by 18 feet, with a barrel-vault and rich arching. A round-headed arch leads to the chancel, which is not in the centre of the east gable, but towards the south; it is 13 feet 8 inches by 11 feet 6 inches, groined by diagonal ribs. The curious recessing of the east wall has been noted. The walls bear traces of paintings in red, yellow, white, and brown. A staircase in the S. tower leads to the overcroft. This is a

lofty, narrow room (27 feet by 16 feet 6 inches), with a pointed vault under the stone roof; there are various flue-like shafts in the wall running horizontally at the level of the floor. The room is 21 feet high, lit by well-constructed opes in the roof.

A new influence came into Ireland late in the 11th century. The old native ornament had died out and interlacings and animal forms had usurped its place by that time, just as the Norman art and influence, fostered in England by Edward the Confessor, had been given irresistible force by the Norman conquest of that country in A.D. 1066. Ere the century had closed Norman ideas and designs were rife in Ireland. Murcheartach O'Brien, the titular "High King" (Ard Righ "with opposition"), about A.D. 1080, corresponded with King Henry I. The close resemblance of a recessed doorway, now rebuilt, in the side wall of Killaloe Cathedral to one at Caen, in Normandy, has often been noticed: it is attributed to King Murcheartach. The period onward, to about A.D. 1150, was rich in ornate carving. Photographs and casts will be found in the collection to illustrate its finest specimens. It is very interesting to note the distinctively Irish feeling and older ornaments that differentiate this style in Ireland from that of the other countries, from Bosnia to Normandy, in which that branch of romanesque work spread.

The subject is difficult and to some extent still controversial, for we must allow for recutting of plainer parts of older doorways and arches, and in some cases ornament of two periods may be found to exist on the same feature. Petrie, whose work (though of great value as an epoch-making advance of rational views on Irish buildings) greatly ante-dated much of what he wrote upon. No antiquary or architect of any experience would for a moment think of attributing such evidently late romanesque work to such early periods as he does, work of the 12th century being placed by him two, or even three, centuries too soon. He equally ante-dates the round towers, which no architect or any others (save a few too conservative Irish antiquaries) attribute to the period earlier than the Norse wars.

Slight hammer dressing is found on the dolmens and stone forts, but nothing like chiselling or squaring of the blocks; only enough to make the stones fit closer together, rarely even that much. The earlier churches exhibit the so-called "cyclopean" architecture, a most misleading word taken from Greek analogies: the term, indeed, rather applies to squared work than to the irregular, closely filled masonry. In Ireland the term always implies irregularity in the masonry, which is far better developed in the churches and towers than in the primitive forts.

The romanesque is, of course, a daughter of the classic styles: it developed on very similar lines in Syria and in Italy. Little of the visibly classic is found in Ireland, but the pediment occurs in the angular, gable-like structures over doorways, as at Roscrea and the Round Tower of Kildare; the finest Irish example is at Clonfert Cathedral, and it is interesting to note its occurrence at Glastonbury, which was long in touch with Ireland. Some of the Irish interlacing has close equivalents at Jerusalem (a fountain), Knin and St. Madoes, in Dalmatia and Ravenna. Such work, if found in Ireland, would raise no doubt as to its native origin. The encircled cross, decorated with similar work, is not uncommon in the Balkan States, so that the once favourite term *opus hibernicum* for such designs should be avoided in accurate writing. Interlaced work certainly existed in late classic times in Italy, and evidently spread from that great centre northward and westward. The resemblance of some Irish fretwork to that of Japan and China is probably accidental. We often find clear proof that ornament has been cut on plain work. Such is probably true of the oft-mentioned doorway of the Round Tower of Dysert, near Croom, in Co. Limerick. It is certainly the original door, for the courses far to either side bend to fit in with it, but it may have only had a broad raised band, into which the mouldings and beads were cut in later times. Similarly a slight band was easily cut into beads when the latter ornament became so "fashionable," and was carried to such tasteless excess in the early 12th century. Unlike designs in the great illuminated books, we find graceful leaf work very commonly introduced into the triangular spaces of the chevrons and elsewhere. On the whole, we may regard much of the decoration of the 12th century as a "Norman Invasion" preceding the less peaceful one of Strongbow, Raymond, and their colleagues. Much misleading argument has also been based on inserted features and chancels; the latter are most usually afterthoughts, and we sometimes (as at Glendalough) see the head of the older east window above the later chancel arch.

We may briefly enumerate the more elaborate or interesting romanesque doorways and arches of Irish buildings. In Wicklow—Glendalough, St. Saviour's, the Cathedral, and St. Mary's. King's County—Clonmacnoise (the Nuns' church, about 1168), and Temple Finchin, Rathau (with a curious round window). Kilkenny—Killeslin. Carlow—Freshford. Tipperary—Monaincha, Roscrea; Cormac's chapel, Cashel (1127-34). Kerry—Kilmalkedar; Ardfert (two); Lough Curraun; Inisfallen. Limerick—Clonkeen. Clare—Dysert O'Dea; Rath; Iniscatha; Tomgraney; Killaloe (two, one about 1110); Kilcorney; Iniscaltra (once assigned to Co. Galway), the Baptism Church, and St.

Caimin's. Galway—Clonfert; Tuam; Inchagoile; Clonaltin; Annadown (these three on Lough Corrib). Londonderry—St. Farannan's. Fermanagh—White Island, Lough Erne. Maghera, in Londonderry, has the unusual design of a lintelled door surrounded by figures within a raised frame. Probably the latest of Irish romanesque porches, that of Limerick Cathedral (about A.D. 1182), has recently been laboriously destroyed, only the inner order being retained by the so-called restorers, and non-Irish details substituted.

Decorated doorways also occur in the round towers of Dysert-Enghusa, Kildare, and Timahoe, the last a very beautiful late example.

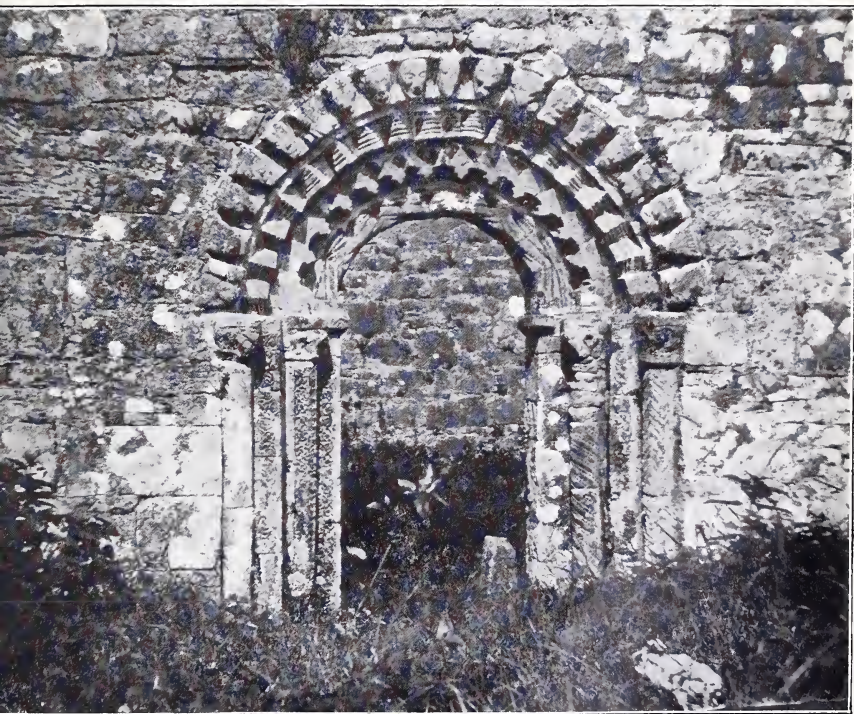
Buttresses are in the form of antæ, mere projections of the side walls beyond the face of the gables. In later days they and the corners of churches without buttresses were decorated by shafts, and sometimes capitals, bases and cornices.

Cornices are rare. We find, however, a few decorated examples, as on the late chancel of St. Caimin's, Iniscaltra, and an ornate and unique example under the cap of the round tower of Devenish, with human faces and other ornaments.

Casts are preserved in the Museum of the doorway and some of the panelling of Cormac's chapel and the doorway of Dysert O'Dea church, both, probably, of the first half of the 12th century, the second being the latest. The last has a characteristic row of heads in the outer order of the arch, four have roll mouldings, and possibly belonged to another structure. They have been regarded as symbols of the four evangelists, but there is no warrant for the belief, as parts of a window with beak-heads holding a roll moulding are extant in the same church. The doorway was rebuilt in the south wall, and some of the stones are evidently misplaced; a rude block has also been inserted to eke out the order in which the heads occur. The sill of Rathblamaic has been already noticed: there is a cast of it in the collection.

ROUND TOWERS.

Despite the several volumes written in the last century to prove the pagan origin of these structures, none now remaining show any masonry or features not found in the larger churches. No primitive buildings in Ireland have anything in common with them; they are built over foundations of older walls and over Christian burials. None are found at any of the great pagan centres; none exist save at a church. They are always mentioned as ecclesiastical, and no one regarded them as pre-Christian till late in the 18th century. Though alleged to have close affinities with buildings in the far East, none identical with them are to be found there.



IRISH ROMANESQUE DOORWAY, DYSERT O'DEA, CO. CLARE.



The Irish cloietheachs are closely similar to towers in France, Lorraine, and Italy, such as the belfry at Epinal and the tower of Chambles. The Monastery of St. Gall had two round stone towers, with cupolas, detached, and at the west end of the church. The French ones were built in and after the 9th century as a defence against the Norsemen, and some Irish towers played the part of castles against the same invaders. In England and other wealthy countries such towers were superseded by more elaborate belfries, but not a few remain in Norfolk, Suffolk, and even Kent. The Irish Laws even give a rule restricting the height of the cloietheach by a proportion derived from its circumference and the sum of the sides of the church. The native name is Cloietheach, bell house, and its corruptions clogas, cluice, and perhaps guilcagh. All native legend, down to the present day, attributes them to local saints, and there is no trace of any contrary belief in the past, but evidence that the same was believed in Anglo-Norman times from the late 12th to the 15th century. Giraldus, at the former date, calls them "ecclesiastical towers, which, in the style of the country, were narrow, high, and also round," while the later English called them steeples, down to the 16th and 17th centuries.

In cases where, as at Kilkenny and Kilmacduach, they were built over burials, the skeletons lie east and west, and have sometimes been cut through in digging the foundation trench: in one case the disturbed remains were brought inside and laid in a row round the wall. This insecure ground accounts for the fact that the above towers lean over. Downpatrick also was a leaning tower, probably from the same cause.

The following towers are named in our records "a tower against burnings" in the "Martyrology of Gorman," March 19th:—Slane, burned, with its inmates and bell, 950; Louth, fell, 968; Armagh burned, 980-996; Tomgraney (built by an Abbot, who died in 969), repaired 1002; Armagh, again burned, 1018-20; Down, struck by lightning, 1018; Clonard, fell, 1040; Roscommon, burned, 1049; Emly, burned, 1058; Kells, Meath, murder in the cloietheach, 1076; Monasterboice, burned, 1097; Armagh, the cap blown down, and Tullemaine, fell, 1121; Trim, burned, 1128; Roscrea, burned, 1131; Clonmacnoise, top destroyed, 1138; Duleek, top struck off, 1147; Fertagh, burned, 1156; Ardbraccan, fell, 1182; Killeslin, thrown down, 1703; Maghera, fell, 1704; Tullyard, fell, 1764; Ardferf, blown down, 1771; St. Michael le Pole, Dublin, injured by storm, had to be taken down, 1775; Errigalkeeroge, levelled, 1809. Some of the existing towers show signs of fire or contain burned wood and bones. Fertagh is split, doubtless by the fire of 1156.

The shape of these structures is familiar to all; those of Clondalkin, Swords, and Lusk are within easy reach of Dublin, while Kildare and Glendalough are very accessible, and Cashel, Monasterboice, and Donaghmore are not too far away to form a pleasant day's visit from Dublin.

They are lofty, tapering structures, usually with a ledge (or more than one) round the base. Save where the ground has been raised, the doorway is from 7 feet to 16 feet up. The basement story is unlighted, the door (facing more or less to the east) is in the second, the three next floors have each a small window, usually to the N., S. and W., but there is sometimes one above the door, no doubt for defence. In the top story there are usually four windows, facing the cardinal points. At Kells, however, there are five, each facing an ancient road leading to the town. The towers where perfect end in a conical cap (*beann chopair* in early Irish accounts), and are from 56 to 112 feet high. They taper with a graceful swell like a Greek column, modern towers not having this feature are stiff and unpleasing, like Glasnevin. The upper part of the towers of Clonmacnoise, Swords, Dromlane, and the caps of Donoughmore, Meath, and Dromiskin, like that of Swords, are late.

The circumference of the base varies from 40 feet to 60 feet, but is much less at the top; for instance, Ardmore tapers inside from 10 feet below to 4 feet 7 inches above. It has three external string courses, and Dysert O'Dea, the largest of the towers, has one. These do not correspond to the floors inside.

Stone vaults and floors are very rare.* The original wooden floors rested on ledges set back in the wall, or more rarely on projecting blocks. In a few instances the lower story was not round. That at Kinneigh was hexagonal; several others were on a square base; one over the room added to the west end of Trinity Church, Glendalough; another over the chancel of Templenessan on Ireland's Eye. Most of these have fallen.

There are thirteen perfect towers, ten with their ancient caps, two with most of them, and one where the old stonework was found inside and rebuilt.† Twelve more are perfect save the caps. There are 27 more from three to six stories high, 10 stumps, and some 30 recorded sites, making over ninety known round towers, with eight more on irregular bases.

* Torry Island and Kinneigh.

† Perfect—Antrim, Clondalkin, Devenish, Rattoo, Temple Finghin, Killala, Turlough, Timahoe, Cashel, Ardmore. Nearly so—Kilree, Ferragh, Kilkenny, Iniscatha or Scatterry, Torry, Cloyne, Kildare, Castledermot, Lusk, Kells, Glendalough, Donoughmore, and Clones.



ANTRIM ROUND TOWER.

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HIGH CROSSES.

The Museum has a fine collection of casts of Irish high crosses (a list is given at the end of this section), and the beautiful series of photographs by Mr. H. Crawford may be found in a case in the Gallery. As we noted, the sculptors first shaped the general form of the cross, leaving projecting panels. On the latter they drew, and afterwards cut in outline, the pattern, or figures, designed for them. They eventually completed these; all stages have come down to our time, the finest series from the blank panel to the finished sculpture being on the cross of Kells, in Co. Meath.

The form of encircled cross was worked out in earlier carved slabs and metal work, and the patterns at times recalled remotely la Tène and other early patterns before the later favourite interlacing swept all before it.

The monuments sometimes bear inscriptions, usually asking for prayers for the maker or the ruling prince, whether of Ireland or of the district in which the cross was made. Thus on the Cross of the Scriptures we find the

names of the High King Flan (A.D. 910) and of Abbot Colman, the maker: On the lesser cross of Monasterboice one of the Abbots named Muredach is commemorated, probably the later of the name (A.D. 915), and at Durrow the name of Abbot Dubtach (A.D. 1010) appears. The Monasterboice inscription is typical, "Or do Muiredach las indernad in chrossa," Pray for Muiredach, by whom was made this cross.

The high crosses appear in the Irish Annals. St. Patrick engraves (doubtless plain) crosses and holy words on pillars, but the more elaborate crosses naturally attracted most attention. The Leabhar Breac names Hua Suanaig's cross at Rahen, the various Annals name the "Cros na Screaptra" at Clonmacnoise, in 1060, and three others, the Cros-Ard, the Cross of Comgall, and that of Bishop Etchen of the same place. Crosses of Columb, Eoghan, Sechnall, and Brigid are named at Armagh in 1196, and a fifth at the door of its fort. Three men in white are said to have marked out a cathair (ring fence) and seven places for crosses in the woods of Forth Barony for St. Munna, or Fintan. Columba hallowed a cross at Sord (Swords). The High Cross at the causeway from St. Ciaran's Church, Clonmacnoise, is named in 1070, and also earlier, in 957; the High Cross of Kells, in Meath, in 1156. The Book of Mulling in the 9th century shows a plan of a monastic ring fort with several crosses and their dedications. A cross was often put near the gateway to recall the words "I am the Door." In some cases the inscription only commemorates some earlier saint, as the lesser cross at Kells, with the words "Patricii et Columbae," and the cross-marked slabs in Aran, "Sci Breani" (the evangeliser of Thomond about 480) and "Tomas Ap(ostolus)."

The subjects on the crosses are comparatively few. Omitting those which cannot be certainly identified, we find the Temptation and the Fall (usually on the lowest part of the west side and balanced by the Crucifixion on the east head). There is a very quaint carving, probably of the Fall, an elaborate tree with a bearded and a beardless figure, on the cross of Dysert O'Dea (cast in Gallery); 2, the Ark with the Dove; 3, the Sacrifice of Isaac (typical of the Crucifixion); 4, David slaying the lion or the bear; 5, the "children" and angel in the furnace; and 6, Daniel and the lions (usually seven, typifying the seven sins), frequently occur. Of new Testament scenes, 7, the Nativity, and 8, the Magi; 9, the flight to Egypt; 10, the Baptism in Jordan; 11, the miracle of the loaves and fishes; 12, the arrest of Jesus; 13, the Crucifixion; 14, the Soldiers at the Sepulchre; and 15, the Last Judgment, are found. Groups of the twelve Apostles are also carved on several crosses, but the figures are not distinguished.

Other scenes have been supposed to represent Cain and Abel, Abraham and Melchisedec, Jacob wrestling with the angel, Death bound in the tomb, Pilate washing his hands, and events from the lives of various Irish saints. The base of Muredach's cross (cast in the great Hall). There is a Zodiac and the chariots of the Sun and Moon are on the an interesting group of the execution of an armed warrior before a judge on the same cross. Dysert O'Dea shows a bishop presiding at the setting up of a tau cross (T). The legend of King Flan helping St. Kieran to set the corner post of his church appears on the "Cross of the Scriptures" at Clonmacnoise, and Miss Stokes regarded (with much plausibility) a panel at Kinetty as representing a legend of St. Finan of that Monastery. There is a rather gruesome representation on the Ahenny N. cross of a procession carrying a slain man, on whom one of two ravens pitches. Two men, one with a ringed processional cross, precede it, a third follows leading an ass, on which the headless body is tied, a dog runs before.

Of religious symbols the Creator is represented by the hand ("Dextera Dei"), the Spirit by the Dove. Satan figures, usually, in the left groups of the "Last Judgment." Sometimes at the weighing of the souls in scales. Of other well-known early symbols the once universal "Good Shepherd" does not occur, nor do Moses, Jonah, or the raising of Lazarus, so common in the Catacombs and early gems. The suastica occurs, but is rare. Flowers and leaves are very rare, and usually late, save the Tree in the "Fall" sculptures, which is often reduced to a mass of interlaced ornament, and an occasional trefoil or flower-headed sceptre. Symbolic animals are common, but rarely identifiable; the symbols of the Evangelists are more usual on metal work than on stone. The curious cones or lingam-like tops of the Kilkieran and Ahenny crosses are noteworthy. The "Baptism of Jesus," as carved at Kells, shows the two springs and branches ("Jor" and "Dan") of the Jordan, as they appear on early ivory triptychs.

As to the ornaments, we sometimes see one or more bands interlaced. Sometimes the bands are the limbs of men and animals, usually worked to a finish, but sometimes with a head more than is needed. The patterns have endless variety, but the general balance is well maintained. Now and then a classic ornament like the "wave" pattern (found also in the Book of Durrow), or fret and key patterns, like those in early Greece, and even in China and Japan, appears on the crosses.

The encircled cross is the favourite form. It is found on slabs of the 8th and 9th centuries at Clonmacnoise, but is far from being confined to Ireland, occurring in Central Europe, in France, Bosnia, and even Syria. In some Irish

crosses, like those of Dromcliff (Sligo), Glendalough, Tuam, and Dysert O'Dea, the circle is omitted. The interlaced bands and the rope ornament (effectively indicated, but never a realistic imitation of an actual rope) are usually "overworked" and spoiled in the modern "copies" of Irish high crosses.

The subject is too large to give more than a few suggestive notes in a small guide, but the bibliography will enable intending students to start their pursuit with a large mass of descriptions and (what is more important) illustrations, to hand.

The more typical crosses remaining may be selected as follows:—

In Ulster—Tynan (Armagh), Torry Island), tau cross, Fahan Mura (Donegal); Clones (Monaghan); Arboe, Donaghmore (Tyrone).

In Munster—Kilfenora, three carved crosses, one perfect, and one at Killaloe; Kilnaboy, tau cross; Dysert O'Dea; Iniscaltra (Clare); Roscrea; Cashel; Ahenny, two crosses (Tipperary).

In Connaught—Tuam, two crosses; Aran, Inishmore, St. Breacan's; Killeany (Galway); Dromcliff (Sligo).

In Leinster—St. Mullin's (Carlow); Kilmainham, St. Douglough's; Tully (Dublin); Old Kilcullen; Moone; Castledermot; Ullard (Kildare); Kilree; Killamery; Kilkieran; Tybroughney (Kilkenny); Clonmacnoise, four crosses (two perfect and rich); Tihilly; Durrow (King's County); Dromiskin; Monasterboice, three fine crosses; Termonfechin (Louth); Killary; Knock; St. Kieran's, three plain crosses; Kells, four carved crosses, two perfect; Duleek (Meath); Bealin (Westmeath); Ferns, Taghmon (Wexford); Glendalough, several; Aghowle (Wicklow).

CASTS IN MUSEUM.

In the Hall—Muredach's cross and the S. cross, Monasterboice; Kilkieran, Tuam.

Gallery—Dromcliff; Kells, shaft, Ahenny (both), Dysert O'Dea, and Killamery.

There are also casts of the two smaller crosses of Kells in the crypt.

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Besides there are many helpful illustrations and papers in the Journal, R.S.A.I.

(The index to the first 19 volumes may be consulted for earlier papers. Kells and Monasterboice (Rev. J. Healy, XXIII., p. 1); Ullard (Col. Vigors, *Ibid.*, p. 251); Dysert O'Dea (T. J. Westropp, XXIV., p. 153); Aran (same, XXV., p. 254); Cruach Mac Dara (F. J. Bigger, XXVI., p. 109); Dromiskin (Gen. Stubbs, XXVII., p. 109); Tihilly and Durrow (Rev. S. De C. Williams and T. J. Westropp, *Ibid.*, pp. 130, 144); Monasterboice (XXVIII., p. 264); Dysert O'Dea, Kilnaboy, &c. (Dr. G. N. MacNamara and T. J. Westropp, XXXIX., p. 244, and XXX., p. 22); Moone (Lord Walter Fitzgerald, XXIX., p. 385); Co. Dublin. Kilfenora (XXX., p. 392; P. J. O'Reilly, XXXI., p. 134, p. 246, p. 385); Kilree (XXXIII., p. 215); Clonmacnoise (T. J. Westropp, XXXVII., p. 277); List of Early Crosses (H. S. Crawford, *Ibid.*, p. 187); Gallen Priory (E. C. R. Armstrong, XXXVIII., pp. 61, 173, 323, 390); Aherlow (H. S. Crawford, XXXIX., p. 59); Lorrha (same, *Ibid.*, p. 127); Kilkieran and Ahenny (same, *Ibid.*, p. 256)).

MISCELLANEOUS ARTICLES.

For want of better classification, we will bring together such miscellaneous articles of household use as combs, pens, inkpots, tablets, pins, drinking vessels, wooden kneading boards, and implements. The combs are of considerable variety and interest and spread over a considerable period. Though often of early date they very closely resemble modern small-toothed combs, but are frequently carved with rich ornament. Decorated "rack" and "toothed" combs, cut out of several small pieces of bone joined together, are to be seen. As for pins we have noted the larger ring pins, but small bronze ones, such as are still used but with rounder heads, are very common and are frequently found in quantities in old graveyards, sandhill settlements and crannoges or lake dwellings. These latter have also yielded many early bone pins and some of the combs noted above, but we must remember that the crannoges continued in use, certainly till, and probably later, than the reign of Queen Elizabeth.

Room IV.—DRINKING VESSELS are numerous. The horn cups and wooden and horn methers will be found in the wall cases. The form of the mether with its looped handles (not unlike a "loving-cup") is getting very familiar, the shape having been taken as a pattern by silversmiths. One in the collection has four handles, and is dated 1590. Horn spoons, wooden kneading troughs, bowls,

with or without handles, and other vessels, usually of late mediæval times, may be examined. The most curious are, perhaps, the kneading table and board with short legs, the yew wood salt-box, the ornamental "butter prints," and the little cask full of bog butter, near the door between Rooms III. and IV. The latter substance is frequently found in bogs, but much discussion has arisen as to why it was placed there. The old Irish flavoured their butter with garlic, and kept it to "ripen" as we do cream cheese, so some believe that it was, in these cases, buried to improve its flavour.

Room III., near the door to Room IV.—The wooden spades some with one "footing," others with two; they are mentioned in ancient poems, such as that said to be by St. Columba, where the monks make high earthworks round his monastery at Durrow. Some of the spades are of oakwood, shod with iron. There are also wooden forks for cultivation, wooden yokes for one or more horses or oxen, wooden paddles and wooden boats, one a fine and nearly perfect canoe, is in the Museum, but not as yet placed with the other Irish antiquities. There are some early specimens of ropes, usually of heath or bog deal fibre, and some ancient wicker work from the crannoge of Ardmore, on the seashore of Co. Waterford.

WRITING MATERIALS.—The collection includes a number of late inkpots, some bear the dates 1686, 1687, and 1729. The pens were usually of quills or reeds. There seems reason to believe that metallic pens were used in early times, but none are known to exist. A little memorandum "book" may be seen. It is a pair of wooden tablets, covered with wax, and some notes had been written on it before the owner lost it, but they are valueless, scribbling in bad Latin about the three parts of an egg.

Room IV.: **HARPS.**—The Irish in olden times cultivated music down to the 18th century, and learned the use of the harp to a wonderful extent. The harp is called "crott," "cruit," or "clairsech," the last word

being late and still in use. The harp was small during the 9th, 10th and 11th centuries, rarely more than 36 inches high. The later mediæval harps had up to 36 strings, and were about 30 inches high. "Brian Boru's harp" is 32 inches high. Some fine specimens of harps are here preserved, but none of very great age. There is a model of the famous harp called after Brian Boru. The original is in the Library of Trinity College. Legend asserts that it was sent to the Pope, and is circumstantial in details about its subsequent wandering. It was given to Henry VIII.; and by him to Lord Clanrickard; it passed to the Macnamaras in Co. Clare, and was played on by Carolan in Limerick, in the first part of the 18th century. The harp seems to belong to two periods—the I.H.S. (from which Petrie concluded that it was made in the 15th century) is an afterthought.

The remains of the very fine Dallway harp, dated 1621, and of Irish origin, will be noted. It has processions of curious animals and monsters, the Royal Arms, the Fitzgerald shield, and elaborate floral designs. Another harp in the collection is very perfect; it probably dates later than the accession of Queen Elizabeth, though possibly before that of James I., and is attributed to a bard of the O'Neills. The forearm ends in a monster's head. A third and very perfect specimen is quite plain, save for having concentric circles on the peak. Its history is unknown.

Room III.: HORSE TRAPPINGS, SPURS, &c.—The older Irish heroes were essentially charioteers, and chariots figure in Irish sculpture down to the time of the great high crosses of the ninth and tenth centuries. Apart from these figures, definite remains are lacking in the collection to give us any general idea of the chariot. The earlier forms of spur are well represented, being usually armed with a formidable spike. They are known as "prick spurs" or "goad spurs." More striking is the later type of "rowel spurs." In some, the star-like rowel is of moderate size, but, in others, it is often very large. Note the

great rowel of the spur (labelled 9). It is of bronze, $6\frac{1}{2}$ inches long, one side has a loop, the other a mortice hole. From the loop hang two bands of metal, one with a clasp, evidently to hold a leathern strap, the other having a hinge.

There are several stirrup loops in the collection, some very small to modern ideas. Saddle bosses intended to cover the pommels. Metal stirrups are of late introduction, but the saddle pommels are of early occurrence. There is a large and instructive collection of bits, usually of most beautiful workmanship. The first type is a simple snaffle, "with a strong mouth-piece, in two parts, having an exceedingly well-fitted hinge-stud between, and large cheek rings." Some of these snaffles and rings are highly decorated or jewelled. The second is "the double-reined driving bit, without an intermediate piece in the hinge." It has metal rods on the cheek rings for the attachment of the reins, while the third type has an iron mouth-piece and no rings, with large cheek plates, sometimes richly ornamented. Of the third type one (numbered 99) is covered with a foliate ornament, such as decorates many of the carved arches of twelfth (or late eleventh) century churches; it is unfortunately broken.

Still later and more advanced are the bits where the reins, being attached at a distance from the mouth-piece, hold the horse with greater force. One ends in dogs' heads; a second has a fretwork with a figure of a horse; another has triangular decorated ends. The combination of bronze and iron is very usual.

Wilde considers the detached spur-like objects (sometimes found in bogs) to be harness pedants; most of these were found in Connaught. They are often 10 and 14 inches long, many richly ornamented, some enamelled. Some suppose them to have been ornaments fitting on the forehead of the horse.

Harness fittings, bosses, rosettes and other studs amount to over 60 specimens. A beautiful specimen, with three loops held in the one ring, was found in the Nore. Horse bells, globular and pear-shaped, still resonant and musical, may be seen. They are made of two "hemispheres" of thin metal, with a clapper. Some of these are supposed to be sheep bells, or for cattle.

Room IV.: MISCELLANEOUS OBJECTS—RINGS.—Apart from seals and signet rings, there is a fine series (from very early times down to the end of the middle ages) of finger-and-thumb rings. As in other antiquities, enamel formed a favourite method of ornamentation. A large brass thumb ring has a seal and the Irish letters C.I.H.B. Another is gilt and has a monogram. Others may be noted, one with a torque pattern hoop and seal, with a heart and inscription, probably of some churchman; one has the well-known device of the "Claddagh rings," a heart between two hands; some have inscriptions inside. Many of the simpler rings were probably intended to be sewn on to clothing; others belonged to ring armour.

MUSIC AND GAMES.—Three interesting chessmen, harp pins of various kinds; a late bronze dice, with a heart, diamond, club and spade, respectively, on four of its faces may be seen.

HOUSEHOLD.—Tools of various kinds, flattened, awl-like, files, chisels, and a pronged implement; needles, forceps, thimbles, razors, tweezers, and so forth, have not yet been fully assigned to their respective uses and ages.

Room III.: TRUMPETS.—Till these have been assigned, more or less, to fixed periods we merely note the fine collection in Room III., and the marvellous specimens of rivetting. Some also are of exceptional length.

Room III.: "OTTER TRAPS."—In the large case beside the door of Room IV., but in Room III. may be seen a curious wooden object like a huge old-fashioned shuttle. It is generally believed to be an otter trap, several of which were found on the continent, are figured in Dr. Munro's "Lake

Dwellings of Europe," and the one from Broughshane, Co. Antrim, is described and illustrated in the *Journal of the Royal Soc. of Antiquaries of Ireland*, Vol. XXI., p. 536. It is 31 inches long and 8 inches wide, of solid oak, with an oblong ope about 4 inches wide and a foot long, over which is fitted a slide, or rather trap door, turning on pins. It was closed by an ashén bow or spring, which when new and pliable doubtless made the trap door snap to with some force, catching any animal that stepped on it firmly by the leg. Another found at Coolnaman, Co. Londonderry, is figured in the old "*Ulster Journal*," Vol. VII., but was lost (or some say burned) long ago.

Room VIII. : PAVEMENT TILES.—In the opposite wing of this part of the Museum an interesting series of Irish church tiles, impressed and enamelled, should be studied. Several of the Dublin churches—St. Audeon's, Christ Church, and St. Mary's Abbey, and not a few of the monasteries in the English Pale. Mellifont, Great Connell, Donabate; Bective, St. Mary's, and the two Cathedrals of Dublin, and Slane have supplied examples to the collection.

Many of the tiles have a heavy glazing of some vitrified substance, and are well burned and very hard. They were more usually partly baked and then painted on the absorbent surface, which was then "glazed." This process, however, was a bad one, as wherever there was much traffic the tiles got easily worn down and spoiled.

A better and very usual process was to press the wet clay into moulds with the intended pattern in relief. This made corresponding hollows in the clay, and when the tiles were glazed and baked they were very lasting. In some instances the hollows were filled with lighter coloured clay, and very handsome results obtained. In another kind the pattern was raised above the surface, but these tiles were also very liable to wear down. The "glaze" was of glass, with oxide of lead, and was liable to turn

black from damp, or from contact with decaying matter.

The tiles usually display armorial devices: animals, birds and monsters; religious devices and emblems; letters and satirical figures, like the little wolves or foxes dressed as pilgrims or begging friars, occurring, for example, at Christ Church Cathedral, Dublin. Occasionally a short inscription, such as "Ave Maria," "Si Dieu plet" (If God pleases), or a family motto, like "Crom aboo" of the Fitzgerald's occurs. I believe only one dated Irish tile is known, bearing "Caricfargus, 1615," with a flower. A rare tile from St. Mary's Abbey, Dublin, shows the frontage of a church. Of animals, the lion, boar (one eating an acorn), cat, dog, fox, eagle and dove, with apes and comic animals, are favourite designs.

